Amendments To The Claims

Claim 1 (Original): A tilted-beam illumination lens system, comprising:

a smooth upper surface; and

a lower surface comprising a plurality of deflective facets deployed asymmetrically about an axis tilted from the surface normal of said upper surface, said lower-surface facets receiving light from a common focal zone and forming a beam therefrom, said beam propagating upward within the body of said lens along said tilted axis, said beam exiting said upper surface with a net deflection angle relative to said surface normal of said smooth upper surface, said deflective facets comprising both refractive and totally internally reflecting facets.

Claim 2 (Original): The system of claim 1 wherein said deflection angle is 30° or more.

Claim 3 (Original): The system of claim 1 wherein positioned within said focal zone are one or more light-emitting diodes.

Claim 4 (Original): The system of claim 1 wherein said system is for use on a vehicle.

Claim 5 (Original): The system of claim 1 wherein said smooth upper surface has curvature conformal with that of the surface onto which said system is installed, and said deflective-facets act to counter said curvature to produce substantially parallel rays exiting said upper surface.

Claim 6 (Original): The system of claim 1 wherein said deflective facets

are linear grooves with transverse deflection, and said focal zone is a linear strip.

Claim 7 (Original): The system of claim 6 wherein said transverse deflection of said plurality of longitudinal facets is the same on both sides of said focal zone.

Claim 8 (Original): The system of claim 6 wherein said focal strip bears a multiplicity of point sources.

Claim 9 (Original): The system of claim 8 wherein said external surface comprises a plurality of transverse cylindrical lenses in correspondence with said point sources.

Claim 10 (Currently amended): The system of claim [[8]] 9 wherein each of said transverse cylindrical lenses comprises multiple radii of curvature.

Claim 11 (Original): The system of claim 1 wherein said deflective facets are circular grooves with a central focal zone and a tilted axis of rotational symmetry.

Claim 12 (Original): The system of claim 11 wherein said circular grooves comprise a TIR lens with rim angle greater than 90°, said tilted axis bringing said rim angle level with said focal zone.

Claim 13 (Original): A tilted-beam illumination lens, comprising:

a smooth upper surface; and

a lower surface having a first half and a second half, wherein said first half is a converging TIR lens and said second half is a diverging TIR lens, said converging

TIR lens and said diverging TIR lens having a plurality of deflective facets, each of said facets having the same output angle such that said first and second halves form a beam substantially off-axis relative to the surface normal of said smooth upper surface.

Claim 14 (Original): The lens of claim 13 wherein said deflection angle is 30° or more.

Claim 15 (Original): The lens of claim 13 wherein said lens is for use on a vehicle.

Claim 16 (Original): The lens of claim 13 wherein said smooth upper surface has a curvature conformal with that of the surface onto which said lens is installed.

Claim 17 (Original): A tilted-beam Illumination lens, comprising:

a smooth upper surface; and

a lower surface comprising a plurality of deflective facets having a bilaterally symmetric TIR lens profile wherein said TIR lens profile is titled relative to the surface normal of said smooth upper surface; and

a rim angle greater than 90° such that said lens forms a beam substantially off-axis relative to the surface normal of said smooth upper surface.

Claim 18 (Original): The lens of claim 17 wherein said deflection angle is 30° or more.

Claim 19 (Original): The lens of claim 17 wherein said lens Is for use on a vehicle.

Claim 20 (Original): The lens of claim 17 wherein said smooth upper surface has a curvature conformal with that of the surface onto which said lens is installed.

Claim 21 (Original): A method of redirecting radiant energy, comprising the steps of:

situating a lens on a body, wherein said lens has a smooth upper surface and a lower surface having a plurality of deflective facets, wherein said facets are both refractive and totally internally reflecting; and

deploying said plurality of deflective facets asymmetrically about an axis tilted from the surface normal of said upper surface; and

receiving light from a common focal zone; and

forming a beam of light from said lower surface; and

transmitting said beam of light with a net deflection angle relative to said surface normal of said smooth upper surface.

Claim 22 (Original): The method of claim 21 wherein said body is a vehicle.

Claim 23 (Original): The method of claim 21 wherein said deflection angle is 30° or more.

Claim 24 (Original): The method of claim 21 wherein said smooth upper surface has a curvature conformal with that of the surface onto which said lens is installed.